

Dwight on a New Gull.¹— In an examination of a series of upwards of fifty specimens of the Western Gull (*Larus occidentalis*) Dr. Dwight shows that the species is clearly divisible into two races, the typical bird of Audubon ranging south at least to Trinidad, California, and a darker mantled form with less gray on the primaries, ranging along both coasts of Lower California north to the Farallon Islands. This latter race Dr. Dwight describes as *Larus occidentalis livens* (p. 11).— W. S.

McAtee on the Food Habits of the Mallard Ducks.— The latest 'Bulletin' issuing from Biological Survey treats of the food of the Mallard and Black Ducks.² A very large amount of data is presented showing what a great variety of animal and vegetable species go to make up the bill of fare of these birds.

Ninety per cent of the Mallard's food we learn consists of vegetable matter, more than a third of which is made up of the seeds, roots, leaves and tubers of sedges and grasses, and about a fifth, of similar portions of smart-weeds and pond weeds. Of the ten per cent of animal matter mollusks contribute 5.73 and insects 2.67.

The food of the Black Duck differs materially from that of the Mallard, largely owing to its frequenting the salt marshes and bays along the coast. Only about three fourths of its food is vegetable and fully half of this consists of pond weeds and other submerged plants. Half of the animal food is composed of mollusks, the edible mussel being the favorite, while crustacea furnish eight per cent.

The Southern Black Duck (*Anas fulvigula*) living in a region where the food supply is not affected by cold winters, feeds more largely upon animal matter, forty per cent of its food being of this nature, the greater portion consisting of mollusks. Its vegetable food is largely grasses and smart-weeds.

This report is of especial interest on account of the extensive propagation of these ducks in a semi-domesticated condition and it is another illustration of the thoroughness of Mr. McAtee's researches along these lines. A half-tone plate of the Mallard and Black Duck from a drawing by Fuertes illustrates the pamphlet. In connection with duck food attention should be called to a recent note by Mr. Alex. Wetmore³ on lead poisoning among water fowl, in which he states that the shot gathered up by ducks in the neighborhood of shooting stands proves fatal to many individuals. It is ground up in the stomachs by the pebbles therein contained and causes severe diarrhoea followed by slow paralysis. By experiment it was found that six number six shot, when swallowed, were fatal in every case.— W. S.

¹ Description of a New Race of the Western Gull. By Jonathan Dwight, M. D. Proc. Biol. Soc. Washington, Vol. 32, pp. 11-13. February 14, 1919.

² Food Habits of the Mallard Ducks of the United States. By W. L. McAtee, U. S. Dept. of Agriculture, Bulletin No. 720, pp. 1-35 and one plate. December 23, 1918.

³ Journal Washington Acad. Sci., Vol. VIII, No. 11, pp. 375-376, June 4, 1918.